

Application No.: 10/603,646

Office Action Dated: October 13, 2005

Response to Office Action Dated: December 16, 2005

**In the Claims:**

1. (Currently Amended) A method for demagnetizing objects between two coils lying opposite one another, wherein the object is located within the region between the two coils within an alternating field for a staying time of a certain duration, and wherein the coils form a single series oscillation circuit which are supplied in a current controlled manner, and wherein the object is previously treated at at least one pre-treatment station for demagnetizing magnetically hard locations in the object.
2. (Original) A method according to claim 1, wherein the staying time over the duration of the cycle lasts between 20 and 500 periods.
3. (Original) A method according to claim 1, wherein two coils are grouped together into one single common coil, and wherein the alternating field is produced within the coil.
4. (Original) A method according to claim 2, wherein the alternating field of the series oscillation circuit is reduced down from a nominal current to an end current by way of a control or a ramp function which are programmed in the inverter.
5. (Canceled)
6. (Currently Amended) A method according to ~~claim 5~~ claim 4, wherein the demagnetization curve is influenced by additional supply of the series oscillation circuit by way of feeding with rectangular impulses by the separate current control.
7. (Original) A method according to claim 4, wherein after completion of the demagnetization procedure, the series oscillation circuit is made voltageless, currentless and chargeless by way of a zero point correction.

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8. (Currently Amended) A method according to ~~claim 5~~ claim 4, wherein after completion of the demagnetization procedure, the series oscillation circuit is made voltageless, currentless and chargeless by way of a zero point correction.

9. (Currently Amended) A device for demagnetizing objects with a demagnetization station which comprises two coils which are present and which are arranged on opposite sides of a transport belt lying opposite one another, wherein the two coils are coreless and are connected in a single common series oscillation circuit and supplied by way of a current control for producing an alternating field, and wherein the series oscillation circuit and the transport belt are operated in a cycled manner so that an object transported on the transport belt remains within an alternating field between the coils of the series oscillation circuit for a certain staying time, and wherein in the transport direction of the transport belt there is present at least one pre-treatment station for demagnetizing magnetically hard locations in the object.

10. (Original) A device according to claim 9, wherein the two coils are grouped together into a single common coil, and wherein the alternating field is produced in the inside of the common coil.

11. (Canceled)

12. (Original) A device according to claim 9, wherein the transport of the objects on the transport belt is effected in a cycled manner.

13. (Original) A device according to claim 12, wherein the transport of the objects on the transport belt effected in a cycled manner is performed in a start-stop way

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14. (Currently Amended) A device according to claim 9, wherein it is used for carrying out the method according to any one of the claims 1 to 6 1-4 and 6.